

**WHAT IS CLAIMED IS:**

1. A digital communication system comprising:
  - a channel state judging section for judging channel states of an inputted signal by using a field sync of the inputted signal; and
  - an equalizing section for compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state.
2. The digital communication system as claimed in claim 1, wherein the channel state judging section comprises:
  - a channel prediction section for predicting the channel states of the inputted signal by means of the field sync;
  - a plurality of buffers for storing the state information regarding a plurality of channels predicted by means of a plurality of the field syncs;
  - a calculating section for calculating a difference between the state information regarding the N number of channels stored in the N number of buffers; and
  - a judging section for judging the channel state on the basis of the calculated difference.
3. The digital communication system as claimed in claim 2, wherein the judging section judges the channel states by means of a threshold value applied to the calculated difference.

4. The digital communication system as claimed in claim 1, wherein the field sync is a PN sequence.

5. An operation method in a digital communication system, the method comprising the steps of:

- (1) judging channel states of an inputted signal by means of a field sync of the inputted signal; and
- (2) compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state.

6. The method as claimed in claim 5, wherein step 1 comprises the steps of:

- (a) predicting channel states of an inputted signal by means of a field sync;
- (b) storing a state information regarding N number of channels predicted by means of N number of the field syncs in N number of buffers;
- (c) calculating a difference between the state information regarding the N number of channels stored in the N number of buffers; and
- (d) judging the channel state on the basis of the calculated difference.

7. The method as claimed in claim 6, wherein, in step d, the channel state is judged by means of a threshold value applied to the calculated difference.

8. The method as claimed in claim 5, wherein the field sync is a PN sequence.

9. The digital communication system as claimed in claim 2, wherein a number N of buffers equals a number N of channels and a number N of field syncs.